



**A**s a steward of our nation's coastal and marine environments, NOAA addresses immediate and long-term environmental threats through its Office of Response and Restoration (OR&R). Scientists are on call around-the-clock to provide the U.S. Coast Guard and other emergency responders with critical information to help minimize environmental damage caused by oil and hazardous chemical spills. Environmental experts assess ecosystems compromised by historic or ongoing contamination and work with other organizations to conduct remediation, restoration, and monitoring of critical natural resources.

### Protecting and Restoring Pennsylvania's Coastal and Marine Areas

NOAA trust resources in Pennsylvania include productive and diverse coastal habitats for fish, shellfish, and other wildlife. Upstream freshwater reaches provide critical spawning and nursery habitats for migratory fish species such as alewife, Atlantic sturgeon, and the endangered shortnose sturgeon. The Delaware Estuary, the world's largest freshwater port, is threatened by heavy maritime traffic and associated oil or other contaminant spills. The state map on the reverse page shows key response and restoration activities in the past year.

### Emergency Response

On November 26, 2004, the *Athos I*, a 750-foot tanker, struck a large submerged anchor while preparing to dock at a refinery on the Delaware River and spilled over 265,000 gallons of oil. Over 115 miles of the river (280 miles of shoreline) and six tributaries were oiled, with resulting harm to fish, shellfish, birds, and other wildlife that use the Delaware River and Bay. NOAA provided immediate scientific support to the U.S. Coast Guard through hazard and shoreline assessments, information on oil behavior and movement, cleanup recommendations, risk communication, and public outreach. NOAA biologists, toxicologists, and economists continue to collect data to determine the full damage to natural resources and

services. NOAA and partner resource trustees will develop a plan describing the injured resources and services and the types of restoration projects to address them.



*Athos I oil spill site*

### Assessment and Restoration

The Greater Philadelphia region has been a major industrial region and population center since the 1800s. Chronic pollution of the urban Delaware Estuary threatens human and ecosystem health.

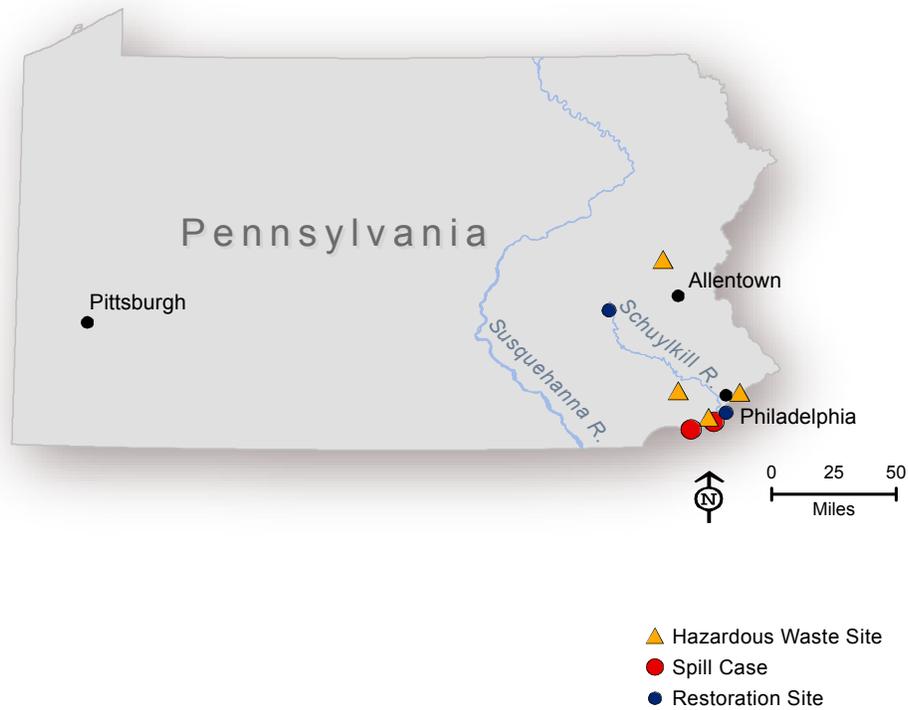
NOAA has created a watershed database and mapping tool to support the Upper Delaware Estuary Regional Cleanup and Restoration Planning Initiative. The project provides information on coastal habitats, natural resources, and sources of contamination. The initiative also identifies restoration opportunities, such as Pennypack Park, that are critical in maintaining a healthy estuary, increasing recreational activities, and improving the quality of life for surrounding communities.



*Pennypack Park erosion*

### Research

NOAA collaborates with other federal, state, and local programs to develop innovative approaches to protecting marine and estuarine environments through research and synthesis of information. The Coastal Response Research Center (CRRC) brings together the resources of a research-oriented university and the field expertise of OR&R to conduct and oversee basic and applied research, conduct outreach, and encourage strategic partnerships in spill response, assessment, and restoration.




---

*NOAA's Office of Response and Restoration—Protecting our Coastal Environment*

---

**For further information about NOAA's Office of Response and Restoration,  
please call (301) 713-2989 or visit our Web site at  
[response.restoration.noaa.gov](http://response.restoration.noaa.gov)**

